

Claims

What is claimed is:

1 1. A framework for a composite application, the framework comprising:
2 an object access layer operable to exchange data with a plurality of enterprise base
3 systems and to present the data to a composite application through a uniform interface;
4 a service layer operable to provide services to the composite application; and
5 a user interface layer operable to provide user interface patterns that facilitate
6 information exchange between the composite application and a user.

1 2. The framework of claim 1, wherein a composite application comprises business
2 objects, business services, and business processes, wherein a business service comprises an
3 action performed on a business object, and a business process comprises a combination of
4 business services.

1 3. The framework of claim 1, further comprising a database for composite
2 application data, wherein the object access layer is further operable to provide local persistency
3 in the database.

1 4. The framework of claim 3, wherein the object access layer is further operable to
2 provide data synchronization and replication of enterprise base system data in the database.

1 5. The framework of claim 1, wherein the service layer comprises:
2 a collaboration services module operable to provide a collaboration service to the
3 composite application; and

4 a workflow services module operable to provide a workflow to the composite
5 application.

1 6. The framework of claim 5, wherein the collaboration services module is
2 operable to link a semantic object to a business object of the composite application.

1 7. The framework of claim 5, wherein a workflow comprises templates, workflow
2 patterns, and actions, a template describing a workflow procedure, workflow patterns
3 describing portions of the template, and actions executing functions to carry out the workflow
4 patterns.

1 8. The framework of claim 1, wherein the service layer further comprises a
2 container for composite application services, the container operable to provide interfaces for
3 non-framework-generated code.

1 9. The framework of claim 1, wherein the user interface layer further comprises a
2 user interface framework that separates the user interface elements from the composite
3 application so that the user interface is decoupled from the logic.

1 10. The framework of claim 1, further comprising:
2 a business object modeler operable to provide a user interface for constructing a
3 business object; and
4 a business object generator operable to generate an executable version of the modeled
5 business object.

1 11. The framework of claim 10, wherein the business object modeler comprises an
2 object modeler and a relation modeler.

1 12. The framework of claim 10, wherein the business object generator comprises a
2 generator framework and a persistency generator.

1 13. The framework of claim 10, wherein the business object generator is operable to
2 code a business object template with metadata and relation data for a business object to
3 generate an executable version of the modeled business object.

1 14. The framework of claim 13, wherein the business object generator is further
2 operable to generate tables and proxies for a business object.

1 15. A method for implementing a composite application in a framework, the
2 method comprising:
3 generating executable code for a composite application;
4 exchanging data with a plurality of enterprise base systems;
5 presenting the enterprise base system data to the composite application through a
6 uniform interface; and
7 facilitating a user's interaction with the composite application through user interface
8 patterns.

1 16. The method of claim 15, wherein generating executable code for a composite
2 application comprises coding a template with business object metadata and relation data.

1 17. The method of claim 16, wherein generating executable code further comprises
2 generating tables and proxies for a business object.

1 18. The method of claim 15, wherein a composite application comprises business
2 objects, business services, and business processes, wherein a business service comprises an
3 action performed on a business object, and a business process comprises a combination of
4 business services.

1 19. The method of claim 15, further comprising providing local persistency in a
2 database for composite application data.

1 20. The method of claim 19, further comprising providing data synchronization and
2 replication of enterprise base system data in the database.

- 1 21. The method of claim 15, further comprising:
 - 2 providing a collaboration service to the composite application; and
 - 3 providing a workflow to the composite application.
- 1 22. The method of claim 15, further comprising providing a container for composite application services, the container operable to provide interfaces for non-framework-generated code portions.
- 1 23. The method of claim 15, further comprising providing user interfaces to model the composite application, the user interfaces allowing specification of attributes and relations for a business object of the composite application.
- 1 24. The method of claim 23, further comprising generating metadata for the business object and relations based on the specifications.

1 25. An article comprising a machine-readable medium storing instructions operable
2 to cause one or more machines to perform operations comprising:
3 generating executable code for a composite application;
4 exchanging data with a plurality of enterprise base systems;
5 presenting the enterprise base system data to the composite application through a
6 uniform interface; and
7 generating user interfaces for facilitating interaction between the composite application
8 and a user by using user interface patterns.

1 26. The article of claim 25, wherein generating executable code for a composite
2 application coding a template with business object metadata and relation data.

1 27. The article of claim 26, wherein generating a executable code further comprises
2 generating tables and proxies for a business object.

1 28. The article of claim 25, wherein the instructions are further operable to cause
2 one or more machines to perform operations comprising providing local persistency in a
3 database for composite application data.

1 29. The article of claim 28, wherein the instructions are further operable to cause
2 one or more machines to perform operations comprising providing data synchronization and
3 replication of enterprise base system data in the database.

1 30. The article of claim 25, wherein the instructions are further operable to cause
2 one or more machines to perform operations comprising:

3 providing a collaboration service to the composite application; and

4 providing a workflow to the composite application.

1 31. The article of claim 25, wherein the instructions are further operable to cause
2 one or more machines to perform operations comprising providing a container for composite
3 application services, the container operable to provide interfaces for non-framework-generated
4 code portions.

1 32. The article of claim 25, wherein the instructions are further operable to cause
2 one or more machines to perform operations comprising providing user interfaces to model the
3 business object, the user interfaces allowing specification of attributes and relations for a
4 business object of the composite application.

1 33. The article of claim 32, wherein the instructions are further operable to cause
2 one or more machines to perform operations comprising generating metadata for the business
3 object and relations based on the specifications.

1 34. A framework for developing and implementing a composite application,

2 the framework comprising:

3 a database for composite application data;

4 an object access layer operable to:

5 exchange data with a plurality of enterprise base systems,

6 present the data to a composite application through a uniform interface,

7 provide local persistency in the database, and

8 provide data synchronization and replication of enterprise base system data in

9 the database;

10 a service layer comprising:

11 a collaboration services module operable to provide a collaboration service to

12 the composite application, and

13 a guided procedure services module operable to provide a guided procedure to

14 the composite application;

15 a user interface layer operable to provide user interface patterns for displaying

16 information relating to the composite application, the user interface layer comprising a user

17 interface framework that separates the user interface elements from the composite application

18 so that the user interface is decoupled from the logic;

19 a business object modeler operable to provide a user interface for constructing a

20 business object of the composite application; and

21 a business object generator operable to generate an executable version of the modeled

22 business object.

1 35. The framework of claim 34, wherein the business object modeler comprises an
2 object modeler and a relation modeler.

1 36. The framework of claim 34, wherein the business object generator comprises a
2 generator framework and a persistency generator.

1 37. The framework of claim 36, wherein the business object generator is operable to
2 code a business object template with metadata and relation data for a business object to
3 generate an executable version of the modeled business object and to generate tables and
4 proxies for a business object.

1 38. The framework of claim 34, wherein a composite application comprises
2 business objects, business services, and business processes, wherein a business service
3 comprises an action performed on a business object, and a business process comprises a
4 combination of business services.

1 39. The framework of claim 34, wherein the collaboration services module is
2 operable to link a semantic object to a business object of the composite application.

1 40. The framework of claim 34, wherein a guided procedure comprises templates,
2 workflow patterns, and actions, a template describing a guided procedure, workflow patterns
3 describing portions of the template, and actions executing functions to carry out the workflow
4 patterns.

1 41. The framework of claim 34, wherein the service layer further comprises a
2 container for composite application services, the container operable to provide interfaces for
3 non-framework-generated code.